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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/894,879	06/29/2001	Paul Glatkowski	8125.002.CNUS	4705

28694 7590 03/02/2007

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EXAMINER	
YOON, TAE H	
ART UNIT	**PAPER NUMBER**
1714	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/02/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	09/894,879	GLATKOWSKI ET AL.	
	Examiner	Art Unit	
	Tae H. Yoon	1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 February 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *23-49,52-54 and 76-122* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *23-49,52-54 and 76-122* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Applicant states that the last office action should have been non-final, and the examiner agrees with applicant. Note that the end of the office action does not contain a clause related to the final rejection, and the examiner made a mistake in the cover sheet. Thus, the finality of the previous office action is withdrawn, and this office action is made final.

Applicant is correct in that a proper terminal disclaimer had been filed on March 24, 2003.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 23-49, 52-54 and 76-122 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The NEW MATTER rejection is maintained for reason of record with following response.

Applicant asserts that the table 1 (114 dB and 119 dB) provides support, but it is direct to a particular composition (PET containing 1.5 wt% of 6:1 elongation product) for particular frequencies (20 KHz and 0.2 GHz). Also, contrary to applicant's assertion, said 114 dB and 119 dB are directed to the **plane wave shielding effectiveness**

(SE_{pw}), not to the **magnetic wave shielding effectiveness (SE_m)**. Claims do not have such limitations, and thus claims contains new matter and are enabling for such composition only. Also, the recited enhancement of at least 10 dB, for example, does not have support contrary to applicant's assertion since said at least 10 dB must include 10 dB.

Also, the limitation recited claim 42 does not have support at page 13 wherein the recited combined limitation, "carbon nanotubes that are substantially not in contact with each other, other than their longitudinal areas" and "are not aligned or oriented to provide electromagnetic shielding" cannot be found in page 9 and table 1 as well as page 13. Contrary to applicant's assertion, a different context or description is recited in pages 10 and 13.

Claims 23-49, 52-54 and 76-103 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the composite of PET and nanotubes having an enhanced electromagnetic shielding, does not reasonably provide enablement for the recited composite. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims.

Rejection is maintained for reason of record with above response.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 23-49, 52-54, 76-103, 104 and 108-122 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Smalley et al (US 6,683,783).

Rejection is maintained for reason of record with following response.

Again, the recited enhancement of the recited dB is an inherent property of the article taught by Smalley et al. Note that any material, especially a solid material, has the electromagnetic shielding property inherently. Applicant also asserts that Smalley et al failed to disclose or suggest that at least aspect ratio and alignment of carbon nanotubes confers electromagnetic shielding effectiveness and applicant's such statement would be a partial evidence that Smalley et al teach the instant composition even though Smalley et al silent as to the electromagnetic shielding effectiveness. But the discovery of the inherent property alone from the known composite does not warrant a patent.

Claims 23-49, 52-54 and 76-122 are rejected under 35 U.S.C. 103(a) as obvious over Smalley et al (US 6,683,783) and Shibuta et al (US 5,908,585).

Rejection is maintained for reason of record with above and following response.

Applicant asserts that the examiner has conceded that Smalley et al does not disclose or suggest applicant's claimed invention during the interview held on January 31, 2006, but it is not true since the examiner has stated that applicant is considering claim language option, which may also overcome Smalley et al and applicant failed to do so.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tae H. Yoon whose telephone number is (571) 272-1128. The examiner can normally be reached on Mon-Thu.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Tae H Yoon
Primary Examiner
Art Unit 1714

THY/February 26, 2007